

Special Management Areas

Coastal Resources of National Significance

Illinois coastal resources of national significance are those with significant ecological, cultural, or historic values. An inventory of specific and enforceable authorities to protect these resources can be found in Chapter 9.

Collation of Issues and Areas Meriting Special Attention

In 2005 IDNR circulated a questionnaire to coastal stakeholders to identify resource issues and geographic areas as focal points for the ICMP. IDNR received 35 responses that served as a basis for a preliminary list, and also aided in developing a preliminary coastal boundary. Survey responses were sorted thematically to facilitate further discussion, and an issue paper was prepared on this subject. These can be found in the Issue Papers section of the CMP site.

The “Resource Issues” identified as meriting special attention were grouped as follows:

- Water Quality
- Shoreline Erosion
- Habitat, Ecosystem and Natural Area Restoration
- Ravine Systems
- Public Access and Recreational Resources
- Historic and Cultural Feature Preservation
- Education and Public Awareness
- Land Acquisition/Easement Opportunities

The “Specific Geographic Areas” identified as meriting special attention were grouped as follows:

- North Point Marina and Illinois Beach State Park
- Waukegan Harbor, Waukegan Lakefront and Waukegan River Watershed
- Chicago River and North Shore Channel River Corridors, and Wilmette Harbor
- Lake Calumet and Calumet River Area
- Little Calumet and Grand Calumet River Corridors

Role of the Technical Advisory Groups (TAGs)

IDNR recommended the formation of Technical Advisory Groups (TAGs) to assist in developing issue papers on resource issues and geographic areas identified as meriting special program attention. Over 100 individuals participated on at least one TAG. Participants represented city/county/state government, special interest groups, universities, property owners, and interested citizens.

TAG facilitators coordinated and received input from the TAG participants, and began preparing issue papers. In November 2005, the IDNR provided each TAG facilitator with a complete listing of TAG participants, showing title and work association, phone number, and e-mail address. A collated list of the questionnaire responses was provided along with directions and guidelines on how to proceed in developing papers. References to program requirements were given to participants to aid in understanding, and serve in developing the ICMP.

TAG Issue Paper Summary

The TAGS prepared 11 issue position papers, all of which are included in the Issue Papers section of the CMP site. ***The Issue Papers contain opinions that may or may not be the policy of the IDNR or all the TAG representatives.*** The issue papers raise concerns, management considerations, and suggested grant opportunities. They also provided analyses and discussion on interests of common consensus, and areas of differing viewpoints. The issue papers were an excellent resource for the ICMP and provided a better understanding of planning, management, and grant project needs.

Program Requirements for APC and APR

CZMA program regulation set forth the requirements for management program approvability. Areas of Particular Concern (APC), have important coastal-related values or characteristics, or may face pressures which require detailed attention beyond the general planning and regulatory system.

Section 923.20(b) of the CZMA regulations states, *“Where a State's general coastal management policies and authorities address state and national concerns comprehensively and are specific with respect to particular resources and uses, relatively less emphasis need be placed on designation of areas of particular concern.”*

Section 923.21 requires, *“The management program must include an inventory and designation of areas of particular concern within the coastal zone, on a generic and/or site-specific basis, and broad guidelines on priorities of uses in particular areas, including specifically those uses of lowest priority. In developing criteria for inventorying and designating areas of particular concern, States must consider whether the following represent areas of concern requiring special management:*

(1) Areas of unique, scarce, fragile or vulnerable natural habitat; unique or fragile, physical, figuration (as, for example, Niagara Falls); historical significance, cultural value or scenic importance (including resources on or determined to be eligible for the National Register of Historic Places);

(2) Areas of high natural productivity or essential habitat for living resources, including fish, wildlife, and endangered species and the various trophic levels in the food web critical to their well-being;

(3) Areas of substantial recreational value and/or opportunity;

(4) Areas where developments and facilities are dependent upon the utilization of, or access to, coastal waters;

(5) Areas of unique hydrologic, geologic or topographic significance for industrial or commercial development or for dredge spoil disposal;

(6) Areas or urban concentration where shoreline utilization and water uses are highly competitive;

(7) Areas where, if development were permitted, it might be subject to significant hazard due to storms, slides, floods, erosion, settlement, salt water intrusion, and sea level rise;

(8) Areas needed to protect, maintain or replenish coastal lands or resources including coastal flood plains, aquifers and their recharge areas, estuaries, sand dunes, coral and other reefs, beaches, offshore sand deposits and mangrove stands.”

Section 923.22 addresses requirements for Areas for Preservation or Restoration (APR) as follows:

“The management program must include procedures whereby specific areas may be designated for the purpose of preserving or restoring them for their conservation, recreational, ecological, historical or esthetic values, and the criteria for such designations.”

APC and APR Analysis for the ICMP

Our coastal region is somewhat unique because of the numerous levels of governmental authorities and extensive public input involving development and land use decisions. Management policies, regulations, and programs for the protection and use of land and water resources within our coastal boundary exist at all governmental levels, and are both general and specific. Nearly the entire inland coastal area is located within a municipal boundary. There are three ecosystem partnerships, and numerous interest groups that routinely provide input on coastal projects. Illinois has strong comprehensive authorities, programs and controls throughout the coastal area on both the state and local level.

The APC’s will address the need for heightened or special management attention in the ICMP, and will include increased intergovernmental coordination, technical assistance, enhanced public expenditures, or additional public services to a designated area. It also may include regulatory, or permit requirements applicable only to the APC. In developing the issues and areas meriting special ICMP attention, no particular additional regulatory requirements were proposed. The ICMP will focus on these areas and issues using technical assistance, governmental coordination, and ICMP grants to assist in funding.

Many of the general issues and geographic areas identified as meriting special attention align with federal examples of general areas of concern. For Illinois, the entire ICMP boundary will be considered “An area or urban concentration where shoreline utilization and water uses are highly competitive.”

Several areas provide essential habitat for wildlife and endangered species, provide areas of substantial recreational value, and are dependent upon access to our coastal waters. North Point Marina and Illinois Beach State Park possess significant habitat, endangered species, fragile environment, recreational value, and protection from shoreline erosion.

The ICMP established “general” areas for APC and APR. In response to the need for increased or special management attention on general APC and APR:

- ICMP staff will assist in coordinating governmental units to address complex or specific issues pertaining to APC and APR. Assistance will be provided in identifying and coordinating existing initiatives and partnership opportunities. The ICMP will also provide coordination on APC or APRs of regional concern, or interest that require coordination among several governmental units. Assistance will be provided in developing a comprehensive needs survey or cost share agreements amongst various governmental entities.
- The ICMP grants program will consider the needs and projects identified as APC and APR. Grants for special projects, research, planning, data needs, inventory, monitoring, and technical assistance are some of the areas that will be eligible for grant funding of APC and APR. Chapter 9 describes the criteria for eligibility, review and grant selection process.

ICMP Inventory and Designation of APC and APR

For each APC category, those uses that are most compatible with the needs and values of that respective APC will have highest priority. Lowest consideration is given to those activities that adversely affect the category. Illinois may designate additional APC’s in the future as the ICMP is being implemented and as the need arises. Nominations of additional Areas of Particular Concern for inclusion in the Coastal Management Program may be suggested by State agencies, Federal agencies, local governments, organizations, and interested private citizens. New APC’s must meet the criteria outlined and will be added as a routine program change.

Category 1: Areas to protect or improve Lake Michigan water quality and inland coastal waterways. Uses that maintain or improve the quality of Lake Michigan and inland coastal waterways will receive top priority. Low priority will be given to activities that harm the natural integrity of these waters.

Category 2: Areas of unique, scarce, fragile or vulnerable natural habitat, including areas of high natural productivity or essential habitat for living resources, including fish, wildlife, and threatened or endangered species. High priority uses are those that promote habitat preservation or wildlife management, undeveloped recreation, restoration, and scientific research. Low priority activities are those that would adversely affect the primary values for which such areas were acquired and are dedicated.

Category 3: Areas of substantial recreational value or opportunity, including public access opportunities. High-priority uses are those that provide public access and promote public recreation in such areas. Uses of low priority are those that inhibit the recreational potential of an area.

Category 4: Areas where development is dependent upon the use of, or access to, coastal waters for industrial or commercial use. High priority will be given to those uses that improve the capabilities of Illinois' ports, lakefronts, marinas, public utilities, roads, infrastructure, historic structures, shipping and navigation channels, brownfields adjacent to the Lake or shipping channels, and urban waterfront areas. Any uses that infringe upon a port, harbor, or navigable waterway's chief functions will be of low priority.

Category 5: Areas needed to protect, maintain or replenish coastal lands and significant resources subject to storms, floods, erosion, and settlement; including floodplains, wetlands, sand dunes, natural areas, offshore sand deposits, and recreational areas. High priority uses for wetlands are those that preserve and restore natural attributes, and serve natural preservation, wildlife habitat, hunting, floodwater retention, groundwater recharge, scientific research and environmental education functions. Any other uses are of lower priority.

The general APR will also include areas of historical significance or cultural value.

General APC Descriptions

This following describes the general APC areas meriting special program attention. The description includes the nature of the concern, and broad guidelines for ICMP assistance.

1. Areas that protect or improve the water quality of Lake Michigan and the Inland coastal waterways.

Protecting and continuing to improve the water quality of Lake Michigan, and the inland coastal waterways, is essential to the health and prosperity of shoreline communities. waters.

Water quality is a cardinal component for the majority of issues and all of the areas identified as meriting special program attention. Discussions on water quality are included in the issue papers on the inland waterways, Lake Calumet and the Waukegan River watershed. The breadth and depth of issues, studies, plans, and institutions involving water quality and their significance to our coastal region are immeasurable.

Water quality is included in the ICMP as a general APC in recognition of its importance. The ICMP will assist in coordinating government efforts. Protection or improvement in water quality is achieved through a reduction in pollution sources, such as: point source discharges, road runoff, litter, abandoned landfills and industrial sites, and sailboat and powerboat sewage. The "Chicago River and North Shore Channel Corridors" issue paper discusses the significance of the Tunnel and Reservoir Project (TARP), the MWRDGC water reclamation plants, and the water quality standards

and issues for the Chicago area waterways. The “Lake Calumet and Calumet River” issue paper discusses the numerous abandoned industrial sites, landfills, and associated pollution sources present in the area. The “Little Calumet and Grand Calumet” paper also discusses these same issues, and the significance of wastewater effluent representing the majority of flow in the Little Calumet during dry periods. The Waukegan Harbor, Lakefront and Watershed issue paper discusses the federal listing of the Waukegan Harbor as an Area of Concern (AOC) for PCBs. It also discusses the potential for sanitary sewer overflows into the Waukegan River during storm events.

Water quality protection or improvement is also achieved through better stormwater and watershed management, through the protection or creation of wetlands, detention basins, aeration systems, and streambank stabilization. The “Ravine Systems” issue paper discusses the problems associated with rapid urban runoff and best management practices to slow the speed of runoff. Many ravines have historically been used as landfills. Stabilization of these ravines through e.g., revetment and/or vegetation could reduce erosion, and provide unique plant communities and wildlife habitat. The lack of stormwater detention, the need for streambank stabilization, and habitat improvement structures are also issues in the Waukegan River watershed.

With the intense use and demand for water dependent recreation, public health issues through water contact is a significant area of concern. Water quality monitoring and testing for fecal pollution is routinely conducted at public beaches during the swimming season by the Lake County Health Department and the Chicago Park District. Four Lake County beaches are monitored by the SwimCast systems, which provide real-time conditions allowing for the most accurate and timely decisions regarding the health of Lake County beaches. SwimCast measures various air and water quality conditions and parameters to help predict *E. coli* levels. The inland coastal waterways are increasingly used for secondary contact forms of recreation including boating, kayaking, and fishing. Engineering analyses are underway to provide feasibility studies, and cost analyses of various management options for protecting water quality. These include: supplemental aeration, disinfection of wastewater discharges, and eliminating combined sewer overflows.

An ICMP priority of the ICMP is to assist in efforts that will lead to the protection and improvement in water quality.

2. Areas of unique, scarce, fragile or vulnerable natural habitat; including areas of high natural productivity, or essential habitat for living resources, including fish, wildlife, and threatened or endangered species.

The number of TAG participants that assisted in the development of the the “Habitat, Ecosystem and Natural Area Restoration” issue paper was greater than for any other TAG. This is due to the number of interest groups where habitat protection is a major focus. The interest in natural habitat area protection is amplified and often parallels the interest in increased outdoor recreational areas. Many of the nature preserves, natural areas and parklands contain walking trails and wildlife viewing areas, that are appreciated by hikers and birders, or persons just looking for momentary

sanctuary. These natural areas also provide significant water quality benefits, with their wetlands and vegetation serving as infiltration and collection pockets.

The variety of habitats within the Lake Michigan coastal area is greater than any other area of the state. Almost three-fourth of Illinois' threatened and endangered bird species are found here. The coastal area contains the only high-quality beach habitat and foredune, and more than half the remaining high-quality prairie. Many plant species, and entire plant communities, only exist in this area.

Illinois is a national leader in its programs and efforts to protect its most rare natural areas. In 1963, legislation was signed creating the Illinois Nature Preserves Commission (INPC), making Illinois the first state to develop a comprehensive statewide program for permanently protecting ecologically important natural areas. These last remaining remnants of our state's natural heritage are permanently protected by state law. Nature preserves are private and public lands that have rare plants, animals, or other unique natural features. Ranging in size from one acre to more than 2,000 acres, nature preserves protect tall grass prairies, oak groves, sandstone bluffs, wetlands, bogs and other threatened natural areas. Currently, nature preserves protect over 900 endangered and threatened plants and animals and contain more than 20% of all Illinois endangered species. The INPC is now a national model.

Many private landowners who have a rare, natural area dedicate their property as a nature preserve. Nature preserve landowners retain title to their land, have reduced property taxes, and receive stewardship assistance. Options available to landowners include: nature preserve dedication, land and water reserve registration, or enrollment as an Illinois natural heritage landmark. The Illinois Natural Areas Preservation Act [525 ILCS 30] governs the INPC and authorizes it to preserve, protect and defend natural areas and endangered species habitat for public benefit.

A portion of Illinois Beach State Park became the first nature preserve in 1964. Since then, INPC's protection has expanded to 71,700 acres of private and public land in 93 of Illinois' 102 counties. Nature preserves provide unique opportunities for recreation, critical scientific study, and education. Many nature preserves are open to the public for hiking and nature watching. Each year the INPC issues 400-500 research permits to biologists, scientists, and students to study and monitor rare plants and animal species. This research will lead to improved ways to protect endangered plants and animals. The nature preserves system serves as a natural storehouse of genetic material, some of which could provide the chemical basis for new drugs and medicines. While protecting the last few remnants of our state's natural heritage, nature preserves also provide living classrooms to benefit future generations.

Illinois Nature Preserves Commission (INPC) areas located within the ICMP boundary are as follows:

- Burnham Prairie Nature Preserve
- Illinois Beach Nature Preserve

- Lyons Prairie and Woods Nature Preserve
- North Dunes Nature Preserve
- Powderhorn Prairie and Marsh Nature Preserve
- Spring Bluff Nature Preserve

In 1978, Illinois completed the nation’s first Natural Areas Inventory to document remaining natural communities and rare species habitats. The Illinois Natural Areas Inventory (INAI) is a comprehensive effort to find, evaluate, describe, and classify the best examples of Illinois' natural heritage, including high quality natural communities and endangered habitats. INAI areas are "environmentally sensitive resources" considered "irreplaceable assets." All state agencies and local governments are required by law to consult with the IDNR whenever actions that could jeopardize these resources are contemplated. The INAI serves as a guide for the INPC when determining the eligibility of lands for protection. The INAI served as a prototype for many other states.

Currently there are only 654 high quality undisturbed natural communities in the state. Approximately half of these areas are unprotected and in danger of being destroyed. Each year, 12 to 15 new nature preserves are dedicated. Although IDNR updates the INAI quarterly, a more extensive update is made to take advantage of new knowledge and scientific discoveries. New inventories identify local and statewide areas of significance, and consider potential for restoring natural areas. A Geographical Information System is used for recording and protecting information about the site, and a website will be created where the public can access site information and area partnerships.

Illinois Natural Areas Inventory (INAI) sites located within the ICMP boundary are as follows:

130th Street Marsh	Illinois Dunes North
Blair Woods	Lake Bluff Woods
Blodgett Bluff	Lake Calumet
Burnham Prairie	Lyons Woods
Crabtree Farm Woods	McCormick Ravine
Dolton Avenue Prairie	Montrose Beach Dune
Fort Sheridan Bluff	Powderhorn Lake and Prairie
Fort Sheridan Site	Ravinia Bluff
Glencoe Botanical Area	Waukegan Beach
Hubbard Woods Site	Wolf Lake
Illinois Beach	

- Ecosystem Monitoring

A state-of-the-environment report published in 1994, titled “The Changing Illinois Environment: Critical Trends,” concluded that ecosystems in Illinois are deteriorating, and their natural functions

are being disrupted by fragmentation and stress. The state then began collecting data on both the extent, and condition of its ecosystems. The Critical Trends Assessment Program (CTAP) completed an atlas of Illinois land cover, an inventory of resource rich areas, and 30 regional watershed assessments. The team consisted of the Office of Realty and Environmental Planning, Natural History Survey, State Geological Survey, State Water Survey, Waste Management and Research Center, and the State Museum. These offices will coordinate with the ICMP by serving as its Technical Advisory Committee (TAC).

The inventory of resource rich areas established priorities for the state's Conservation 2000 Ecosystems Program. Most of the program's Ecosystem Partnerships have at their core a resource-rich area. Ecosystem Partnerships consist of individuals and interest groups that work together to maintain and enhance ecological and economic conditions within a defined boundary. The Ecosystem Partnerships working within the ICMP boundary are the Lake Michigan Watershed, Chicago Wilderness, and Lake Calumet. As Ecosystem Partnerships were formed, CTAP prepared regional "Critical Trends" reports for their areas. Usually based on watershed boundaries, the reports describe an area's geology, water resources, living resources, socio-economics, environmental quality, and archaeological resources. They are designed to provide the baseline information the partnerships need to set priorities and develop management plans.

Two assessment reports have been prepared on areas within the ICMP boundary. *The Chicago River/Lake Shore: An Inventory of the Region's Resources* (October 2004), provides an excellent discussion on the various terrains and natural habitats which evolved, and which exist today. The other report, *The Calumet Area: An Inventory of the Region's Resources*, includes a description of changes in the prairies, rivers, streams, lakes, wetlands, forests, and savannas. Another excellent report, *The Illinois Steward, Discovering Our Place in Nature* (Volume 14, No. 4, Winter 2006) published by the University of Illinois at Urbana-Champaign, the Illinois-Indiana Sea Grant College Program, and the Illinois Natural History Survey. This report provides an overview of transformations of the Chicago River; highlights nature preserves within its watershed, and the change in social attitudes toward the river. It also discusses current challenges posed by invasive species, and recent efforts to improve the river to meet the growing demands of its urban setting.

CTAP has developed a long-term monitoring network, that provides current information on the condition of the major natural ecosystems. This information will support ICMP efforts to preserve, restore, and manage ecosystems across the state. CTAP seeks to develop a base of practical, real-world information that will help shape effective and economical environmental policies for the future on a sound ecosystem basis.

Trained volunteers in the EcoWatch network carry out less detailed biological surveys at several hundred sites. Together the two groups collect a representative set of biological indicators that measure environmental quality. The indicators include information on plants, birds, fishes and aquatic insects that will track changes in the four ecosystems.

Some general findings and issues applicable statewide and within the ICMP boundary include:

- **Habitat fragmentation**

This is a widespread threat to ecosystem functioning, which could limit attempts to maintain and enhance biodiversity. The splintering of wetlands, prairies, and forests into fragments makes it harder for small, isolated populations of plants and animals to breed. It also leaves them vulnerable to accidental eradication through fire or other mishap. Competition from exotic species also often increases when contiguous habitats are split by development. By 1976, less than 1/100th of 1%, or 2,352 acres, of high-quality original prairie remained in Illinois. Four of every five remaining acres of prairie are less than ten acres in size. The result is a trend toward a generic environment populated mainly by "generalist" species able to exploit simplified ecosystems. Habitat fragmentation and competition from exotic species have combined to threaten once-stable ecosystems. Healthy complex ecosystems linger mainly in habitats of marginal use to humans, such as river bottomlands, swamps, hillsides and bogs.

- **Urban Sprawl**

By 1990, Illinois' urban fringe had grown to house 37% of the state's population. The trend has affected air quality, petroleum consumption, and land use that are disproportionate to the population. Physical, rather than chemical, changes are probably the most disruptive force in Illinois stream ecology today. Urbanization is encroaching on Illinois streams and widespread channelization has altered water flow.

Most streams that drain prairie landforms have been straightened, their canopies removed, and watersheds tiled to drain fields more quickly. The data collected by CTAP scientists and RiverWatch volunteers note that most streams lack natural habitat features such as wooded riparian corridors, winding stream channels, and stable in-stream habitat such as coarse rocks and wood debris. Restoring native vegetation along streams would shade the streams, stabilize banks, and filter sediment and chemicals from runoff before they reached the streams, resulting in less siltation and desiccation and lower water temperatures.

Illinois wetlands harbor a great wealth of biological diversity and include many different environments, such as wet sand prairie, marsh and sedge meadow. An estimated 64 percent of Illinois' threatened or endangered species inhabit wetlands. Pre-settlement wetlands constituted one acre in every five; wetlands have since dwindled to 918,000 acres, of which only 6,000 acres are undisturbed. Recent laws have slowed the rate of wetlands destruction, and federal rules have led to the mitigation of wetland losses by the construction or restoration of wetlands. Unfortunately, even intact wetlands remain vulnerable to invasion by pollutants, sediments and exotic species. Artificial wetlands to date have duplicated neither the biological diversity nor the hydrological complexity of natural wetlands.

Asian Carp and other non-native species are threatening native populations. These species have rendered the ecology of Lake Michigan coastal zone unstable. Native mussels are threatened by accidentally introduced zebra mussels. Invasions by exotic or invasive plants and insect species are increasing in severity and scope. The movement threat of Asian carp and other species and viruses between the Great Lakes and the Illinois/Mississippi River system is of great concern.

The Illinois coastal zone contains the richest variety and concentrations of habitat in the state. Beach and foredune habitat are found nowhere else. The area contains about 55 percent of the all-remaining high-quality sand prairie. Illinois Beach State Park contains the largest undeveloped single tract of coastal habitat. Its 6.5 miles of shoreline and the Illinois Beach and North Dunes nature preserves contain unique coastal beach ridge, and swale topography, including 14 high quality natural communities and at least 31 state threatened or endangered species. The area contains 1,153 acres of wetland that have not been degraded. The diverse prairie habitat found at Spring Bluff Forest Preserve provides a home to many bird species found nowhere else in the area. The Lake Michigan bluff ravine system may contain as many as 16 state threatened or endangered species supported by the unique wetland habitat created by seepage exiting into the ravines. Remnant prairie and wetland systems exist throughout the Lake Calumet area. The Lake Michigan shoreline is especially important for bird migratory stopover habitat, such as Montrose Point. Other important habitat areas are discussed in the CTAP assessment reports, the TAG issue papers, and other reference documents.

Endangered and Threatened Species located within the ICMP boundary are as follows:

Scientific Name	Common Name
<i>Aflexia rubranura</i>	Redveined Prairie Leafhopper
<i>Agalinis skinneriana</i>	Pale False Foxglove
<i>Amelanchier sanguine</i>	Shadbush
<i>Ammodramus henslowii</i>	Henslow's Sparrow
<i>Ammophila breviligulata</i>	Marram Grass
<i>Arctostaphylos uva-ursi</i>	Bearberry
<i>Aster furcatus</i>	Forked Aster
<i>Bartramia longicauda</i>	Upland Sandpiper
<i>Bolboschoenus maritimus</i>	Alkali Bulrush
<i>Cakile edentula</i>	Sea Rocket
<i>Calopogon tuberosus</i>	Grass Pink Orchid
<i>Carex aurea</i>	Golden Sedge
<i>Carex garberi</i>	Sedge
<i>Carex viridula</i>	Little Green Sedge
<i>Castilleja sessiliflora</i>	Downy Yellow Painted Cup
<i>Catostomus catostomus</i>	Longnose Sucker
<i>Ceanothus herbaceous</i>	Redroot

<i>Chamaesyce polygonifolia</i>	Seaside Spurge
<i>Charadrius melodus</i>	Piping Plover
<i>Chlidonias niger</i>	Black Tern
<i>Cirsium pitcher</i>	Pitcher's (Dune) Thistle
<i>Clonophis kirtlandi</i>	Kirtland's Snake
<i>Cypripedium candidum</i>	White Lady's Slipper
<i>Drosera rotundifolia</i>	Round-leaved Sundew
<i>Egretta caerulea</i>	Little Blue Heron
<i>Egretta thula</i>	Snowy Egret
<i>Eleocharis olivacea</i>	Spikerush
<i>Eleocharis pauciflora</i>	Few-flowered Spikerush
<i>Elymus trachycaulus</i>	Bearded Wheat Grass
<i>Emydoidea blandingii</i>	Blanding's Turtle
<i>Etheostoma exile</i>	Iowa Darter
<i>Falco peregrines</i>	Peregrine Falcon
<i>Fundulus diaphanous</i>	Banded Killifish
<i>Gallinula chloropus</i>	Common Moorhen
<i>Haliaeetus leucocephalus</i>	Bald Eagle
<i>Hypericum kalmianum</i>	Kalm's St. John's Wort
<i>Incisalia polios</i>	Hoary Elfin
<i>Ixobrychus exilis</i>	Least Bittern
<i>Juncus alpinoarticulatus</i>	Richardson's Rush
<i>Juniperus communis</i>	Ground Juniper
<i>Juniperus horizontalis</i>	Trailing Juniper
<i>Kinosternon flavescens</i>	Illinois Mud Turtle
<i>Lathyrus ochroleucus</i>	Pale Vetchling
<i>Lechea intermedia</i>	Pinweed
<i>Lycaeides melissa samuelis</i>	Karner Blue Butterfly
<i>Menyanthes trifoliata</i>	Buckbean
<i>Notropis heterodon</i>	Blackchin Shiner
<i>Nyctanassa violacea</i>	Yellow-crowned Night Heron
<i>Nycticorax nycticorax</i>	Black-crowned Night Heron
<i>Oenothera perennis</i>	Small Sundrops
<i>Orobanche fasciculata</i>	Clustered Broomrape
<i>Paraphlepsius lupalus</i>	Leafhopper
<i>Phalaropus tricolor</i>	Wilson's Phalarope
<i>Pinus banksiana</i>	Jack Pine
<i>Platanthera clavellata</i>	Wood Orchid
<i>Platanthera flava</i> var. <i>herbiola</i>	Tubercled Orchid
<i>Platanthera leucophaea</i>	Eastern Prairie Fringed Orchid
<i>Platanthera psycodes</i>	Purple Fringed Orchid
<i>Poa alsodes</i>	Grove Bluegrass

Poa languid	Weak Bluegrass
Polygonatum pubescens	Downy Solomon's Seal
Populus balsamifera	Balsam Poplar
Potamogeton gramineus	Grass-leaved Pondweed
Potamogeton robbinsii	Fern Pondweed
Rhynchospora alba	Beaked Rush
Rubus odoratus	Purple-flowering Raspberry
Rubus pubescens	Dwarf Raspberry
Salix syrticola	Dune Willow
Scirpus microcarpus	Bulrush
Shepherdia Canadensis	Buffaloberry
Spermophilus franklinii	Franklin's Ground Squirrel
Spiranthes lucida	Yellow-lipped Ladies' Tresses
Sterna hirundo	Common Tern
Tofieldia glutinosa	False Asphodel
Triglochin maritime	Common Bog Arrow Grass
Triglochin palustris	Slender Bog Arrow Grass
Utricularia cornuta	Horned Bladderwort
Utricularia intermedia	Flat-leaved Bladderwort
Utricularia minor	Small Bladderwort
Veronica scutellata	Marsh Speedwell
Viola conspersa	Dog Violet
Xanthocephalus	Yellow-headed Blackbird

3. Areas of substantial recreational value or opportunity, including public access.

Recreational resources within the Illinois coastal zone are critical to quality of life in the area. The combined population of Cook and Lake Counties is over 6 million and is projected to grow to 6.8 million by 2030. Public access to the recreational coastal areas not only serves local residents but also the numerous visitors. Many communities already have planning documents that address recreation and public access needs. Planning efforts to increase and improve upon recreational resources, such as lakeshore parks and open space are ongoing. The ICMP can assist coastal communities by building upon their planning efforts and in seeking out opportunities to provide public access and recreational resources. The ICMP can play a unique role in assisting the integration of broad based or regional goals with neighboring municipalities.

Chapter 5, and the *Public Access and Recreational Resources* issue paper provide descriptions of the existing recreational resources, and issues requiring special program attention and assistance. Several considerations discussed in these documents are summarized as follows:

- Recreation interests in this urban coastal setting are diverse and include areas and activities that are water or trail dependent, for nature viewing or retreat, trail use, or which support outdoor and public events. The stewardship and development challenge is to provide a diversity of access and recreation.
- Multiple approaches may be needed to improve public access to assure that the greatest number of citizens can benefit. These may include improvements in public transportation, parking for vehicles and bicycles, accessibility for seniors and persons with a disability, accessibility over major roadways and tracks, and trails which link parks, beaches and recreation areas. Providing safe access for pedestrians between the bluff portions of lakeshore parks down to the beach. Trail improvements are needed within many of the ravine parks.
- Access and recreational opportunities should be enhanced, and expanded, to the highest degree possible, but not create unrestricted access to all public areas. Prudent stewardship requires restricted or denied access, to recreational uses in certain areas for reasons such as site preservation, habitat restoration, or public safety.
- The inland waterways, Lake Calumet, and the Calumet River may provide the greatest opportunities for improving pedestrian and watercraft access. These waterways offer intra-urban recreational opportunities as well as access and links between inland waters and Lake Michigan. However, efforts to enhance or increase public access/recreation along these water ways must consider the primary role in storm and wastewater management and commercial use.

4. Areas where industrial or commercial development is dependent upon the use of, or access to, coastal waters.

This general APC includes ports and harbors, port loading facilities, docking and mooring areas, shipping and navigation channels, brownfields adjacent to the lake or shipping channels, prime industrial and urban waterfront areas, and associated dependent facilities. The geographic areas that contain these water dependent facilities include the Calumet Harbor; Lake Calumet; the Calumet River; the ICMP corridor sections of the Little Calumet and Grand Calumet Rivers; the Chicago Harbor; the ICMP corridor sections of the Chicago River and its branches; the North Shore Channel; Wilmette Harbor; Waukegan Harbor; the Waukegan Lakefront, and North Point Marina.

Chicago has been referred to as “America’s crossroads,” where all modes of travel and freight intersect. Five federal highways and six major railroads pass through Chicago, and it’s economy is directly tied to its central location, its transportation infrastructure, and its port facilities.

Waterway transportation is the most efficient method per unit cost. It dramatically reduces the number of trucks on the road, and the environmental impacts of alternatives. The Port of Chicago links the inland-river system and the Great Lakes. It yearly moves over 26 million tons of natural

resources and other goods. In a survey conducted for 2002, it was estimated that 30,000 jobs in the area were related to Port activities.

These geographic areas also contain most of the resource issues identified as meriting special program attention: water quality; erosion; habitat; public access; recreation; and land acquisition opportunities. Coastal water dependent areas contain the controlling structures separating Lake Michigan and the inland waterways, and the routes controlling effluent discharges and storm runoff. They also connect between the Great Lakes and the Mississippi River basins, providing a route for the passage of invasive species. Constraining factors include the U.S. Supreme Court Decree limiting diversions, the demand for Lake Michigan water supply, navigation, and public safety.

Land use decisions in these coastal water dependent areas require analysis of the complex resource-related issues, and weighing the competing demands for these limited areas and resources. The desire and need for maintenance or development of industrial areas competes with the desire and need for commercial development. They each compete with the desire and need for open space, recreation, and public access demanded by the ever growing population. These complex issues require multi-objective planning, that most often requires balancing of interests to gain the greatest societal benefits. Many organizations have adopted plans and vision statements for land use and development.

5. Areas that protect, maintain or replenish coastal lands and significant resources subject to storms, floods, erosion, and settlement, including floodplains, wetlands, sand dunes, natural areas, offshore sand deposits, recreational areas, ports, lakefronts, marinas, public utilities, roads, infrastructure, and historic structures.

The ICMP will assist on issues related to the protection of coastal lands and significant resources from precipitation and wind, and changes in lake level and climate.

This APC includes the issue paper descriptions on erosion occurring on the coastal shoreline, ravine systems, and in the Waukegan River. It also includes the Illinois Beach State Park and North Point Marina, including the Dead River and Kellogg Creek watersheds and in issue papers describing wetlands, floodplains, natural areas, ports, infrastructure and public recreational facilities.

APC Summary

The ICMP will provide technical assistance, facilitate governmental coordination, and award and provide oversight to address the issues and significance of these areas. The ICMP, with input from the TAC and the CAG, will prioritize issues. Broad APC guidelines will include:

- Importance of the issue with respect to its urgency and impact upon failure to take action
- Degree of regional benefit the action will provide
- Cost benefit ratio of the proposed effort

- Likelihood of achieving beneficial results in the manner and effort proposed

APR Description

The following is a general description of Areas for Preservation and Restoration (APR). Section 923.22 of the CZMA regulations states *“the management program must include procedures whereby specific areas may be designated for the purpose of preserving or restoring them for their conservation, recreational, ecological, historical or esthetic values, and the criteria for such designations.”*

Through APR's, the ICMP provides the opportunity for a specific area designation process. Through enforceable management and other legal instruments, a specific area may be preserved or become eligible for restoration and assistance. Future specific APR designation will provide the flexibility for the ICMP to address situations that may change over time. The criteria for designation and nomination guidelines for APR designations are discussed below.

Criteria for APR Designation

- The specific area for designation must be located within the ICMP Boundary
- The specific area must meet at least one of the general APC categories
- The specific area must require additional management criteria or a legal instrument for preservation or restoration
- The specific area must be either on publicly controlled lands, or a legal instrument must be provided, to ensure APR designation remains in perpetuity.
- The methods proposed to preserve or restore a specific area must be technically and financially feasible and achievable.
- The ICMP will only consider voluntary requests from landowner(s) of the specific areas for preservation or restoration.
- The ICMP will only consider APR designation from landowner(s) who agree to comply with all legal instruments and actions necessary to meet the objectives to preserve or restore the area.

Designating APRs

- The ICMP will only review nominations that meet all of the criteria for designation
- The ICMP will seek input and comments from the TAC, the CAG and any state or local governmental agency, as needed, to ensure that the criteria for designation has been met
- Nominations for designating an APR will be subject to final approval of the IDNR Director